

IN THE CLAIMS:

The text of all pending claims are set forth below. Cancelled and withdrawn claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (previously amended), (cancelled), (withdrawn), (new), (previously added), (reinstated - formerly claim #), (previously reinstated), (re-presented - formerly dependent claim #) or, (previously re-presented). Please AMEND claim 20 and ADD new claim 36 in accordance with the following:

Claims 1-15 (canceled)

16. (previously added) An electronic circuit for generating a transmit frequency for a transceiver comprising:

a controllable oscillator to generate an output at an oscillator frequency;

a divider, coupled to said controllable oscillator, to produce an output with a frequency $1/N$ of the oscillator frequency; and

a mixer stage having inputs coupled to the outputs of said controllable oscillator and said divider and producing an output used in generating a signal at the transmit frequency.

17. (previously added) The electronic circuit as claimed in claim 16, further comprising a band filter, coupled to the output of said mixer stage, to generate the signal at the transmit frequency.

18. (previously added) The electronic circuit as claimed in claim 17, further comprising a phase locked loop circuit coupled to an input of said controllable oscillator to provide a reference frequency and to receive as an input at least one of the output of said controllable oscillator and the signal at the transmit frequency produced by the band filter.

19. (previously added) The electronic circuit as claimed in claim 17, further comprising a transmit output stage coupled to receive the signal at the transmit frequency from said band filter; and

a control device, coupled to the output of said mixer stage when said transmit output stage is switched on, to superimpose on an oscillator control signal a data signal to generate a frequency modulation of the output of said controllable oscillator.

20. (currently amended) ~~The~~An electronic circuit as claimed in claim 16 for generating a transmit frequency for a transceiver, wherein said mixer stage comprises comprising:

a controllable oscillator to generate an output at an oscillator frequency;

a divider, coupled to said controllable oscillator, to produce an output with a frequency 1/N of the oscillator frequency; and

a single-sideband mixer having inputs coupled to the outputs of said controllable oscillator and said divider and producing an output used in generating a signal at the transmit frequency.

21. (previously added) The electronic circuit as claimed in claim 20, wherein said single-sideband mixer is an Image Reject Mixer.

22. (previously added) The electronic circuit as claimed in claim 20, further comprising a phase locked loop circuit coupled to an input of said controllable oscillator to provide a reference frequency and to receive as an input at least one of the output of said controllable oscillator and the output of said single-sideband mixer.

23. (previously added) The electronic circuit as claimed in claim 22, further comprising a transmit output stage coupled to receive the signal at the transmit frequency from said single-sideband mixer; and

a control device, coupled to the output of said single-sideband mixer when said transmit output stage is switched on, to superimpose on an oscillator control signal a data signal to generate a frequency modulation of the output of said controllable oscillator.

24. (previously added) The electronic circuit as claimed in claim 23, wherein said control device is an ASIC component.

25. (previously added) The electronic circuit as claimed in claim 23, wherein said control device activates two switches alternately, to disconnect the control input of the oscillator upon switching on said transmit stage by said phase locked loop circuit and to supply the data signal for frequency modulation.

26. (previously added) The electronic circuit as claimed in claim 25, further comprising a superimposition receiver, coupled to the output of said controllable oscillator to obtain a superimposition frequency directly from the oscillator frequency; and

a switch circuit having a first input used during transmission coupled to the output of said mixer stage, a second input used during reception coupled to said controllable oscillator, and an output coupled to said phase locked loop circuit.

27. (previously added) The electronic circuit as claimed in claim 16, further comprising an amplifier having an input coupled to the output of said mixer stage.

28. (previously added) The electronic circuit as claimed in claim 16, wherein said controllable oscillator is voltage-controlled.

29. (previously added) The electronic circuit as claimed in claim 16, wherein said controllable oscillator is current-controlled.

30. (previously added) The electronic circuit as claimed in claim 16, wherein a reference frequency is supplied externally.

31. (previously added) The electronic circuit as claimed in claim 16, further comprising a modulator, coupled between said divider and said mixer stage, to supply an IQ modulation baseband signal.

32. (previously added) The electronic circuit as claimed in claim 31, wherein said modulator performs vector modulation.

33. (previously added) The electronic circuit as claimed in the preceding claim 32, wherein the output from said divider, phase-shifted by 0°/90°, is used in generation of the vector

modulation of said modulator.

34. (previously added) The electronic circuit as claimed in claim 16, further comprising a modulation stage at an output of said electronic circuit to perform modulation of the transmit signal.

35. (previously added) The electronic circuit as claimed in claim 31, wherein said modulation stage is a vector modulation stage.

36. (new) An electronic circuit for generating a transmit frequency for a transceiver comprising:

a controllable oscillator to generate an output at an oscillator frequency;

a divider, coupled to said controllable oscillator, to produce an output with a frequency $1/N$ of the oscillator frequency;

a mixer stage having inputs coupled to the outputs of said controllable oscillator and said divider and producing an output, used in generating an output signal at the transmit frequency with frequency jumps caused by switching suppressed.